## Contents Volume 110

The osmium isotopic composition of organic-rich marine sediments	
G. Ravizza and K.K. Turekian	1
<sup>226</sup> Ra in the Black Sea and Sea of Marmara	
D.J. O'Neill, J.F. Todd and W.S. Moore	7
A high resolution palaeoclimatic record for the last 27,500 years in tropical West Africa from the carbon and nitrogen	
isotopic composition of lacustrine organic matter	
M.R. Talbot and T. Johannessen	23
Sulfate reduction using methane in sediments beneath a bathyal "cold seep" giant clam community off Hatsushima Island, Sagami Bay, Japan	
T. Masuzawa, N. Handa, H. Kitagawa and M. Kusakabe	39
Brine history indicated by argon, krypton, chlorine, bromine, and iodine analyses of fluid inclusions from the Mississippi Valley type lead-fluorite-barite deposits at Hansonburg, New Mexico	
J.K. Böhlke and J.J. Irwin	51
Low-temperature exsolution in refractory siderophile element-rich opaque assemblages from the Leoville carbonaceous chondrite	
S.B. Simon and L. Grossman	67
Internal circulation in a buoyant two-fluid Newtonian sphere: implications for composed magmatic diapirs	
R.F. Weinberg	77
Osmium isotopes in the aerosols of the mantle volcano Mauna Loa	
U. Krähenbühl, M. Geissbühler, F. Bühler, P. Eberhardt and D.L. Finnegan  HIMU-EM: The French Polynesian connection	95
C. Chauvel, A.W. Hofmann and P. Vidal	99
Helium isotope geochemistry of some volcanic rocks from Saint Helena	
D.W. Graham, S.E. Humphris, W.J. Jenkins and M.D. Kurz	121
Helium isotope geochemistry of mid-ocean ridge basalts from the South Atlantic	
D.W. Graham, W.J. Jenkins, JG. Schilling, G. Thompson, M.D. Kurz and S.E. Humphris	133
Mantle and crustal contribution in the genesis of recent basalts from off-rift zones in Iceland: Constraints from Th, Sr and O isotopes	
O. Sigmarsson, M. Condomines and S. Fourcade	149
Mantle-lithosphere bodies in the Alboran crustal domain (Ronda peridotites, Betic-Rif orogenic belt)	
M. Torné, E. Banda, V. García-Dueñas and J.C. Balanyá  Repeated thermal resetting of phengites in the Mulhacen complex (Betic Zone, southeastern Spain) shown by 40Ar/39Ar	163
step heating and single grain laser probe dating	
K. De Jong, J.R. Wijbrans and G. Féraud	173
Excess argon, crustal fluids and apparent isochrons from crushing K-feldspar	
G. Turner and W. Songshan	193
The effect of oxygen fugacity on the solubility of carbon-oxygen fluids in basaltic melt	
A.R. Pawley, J.R. Holloway and P.F. McMillan	213
Experimental determination of U and Th partitioning between clinopyroxene and natural and synthetic basaltic liquid T.Z. LaTourrette and D.S. Burnett	227
1.2. La fouriette and D.S. Burnett	44
Errata	
Early Cretaceous polarity chrons CM0 to CM11 recorded in northern Italian land sections near Brescia	
J.E.T. Channell and E. Erba  The RRR triple junction at the southern end of the Pacific-Cocos East Pacific Rise	245
P. Lonsdale, N. Blum and H. Puchelt	246